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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,660	06/04/2001	Hiraku Izumino	NAK-052-USA-P	1310
27955	7590	06/22/2005	EXAMINER	
TOWNSEND & BANTA c/o PORTFOLIO IP PO BOX 52050 MINNEAPOLIS, MN 55402			JARRETT, SCOTT L	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/871,660	IZUMINO ET AL.	
	Examiner	Art Unit	
	Scott L. Jarrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) _____
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: System and Method for Inventory Replenishment in a Distribution Network.

Drawings

2. Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated, as per applicant's own admission "FIG.5 shows a conventional...", Specification Page 1, Paragraph 3 and Page 6. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically the disclosure fails to state or teach one skilled in the art how to “compresses” surplus inventory. Without this disclosure one skilled in the art would be unable to practice the invention without undue experimentation.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 4 and 5 the disclosure does not clearly define the phrases “grasp” or “grasping”. The phrases grasp/grasping as claimed can be interpreted in a plurality of ways including but not limited to: understanding of the nature or meaning or

Art Unit: 3623

quality or magnitude of something, hold firmly, understanding with difficulty or the like thereby making the terms grasp/grasping as claimed vague and indefinite. Examiner interpreted grasp/grasping to mean any of the definitions discussed above.

Further Regarding Claim 4 the disclosure does not clearly define the phrase "compresses". The phrases compresses as claimed can be interpreted in a plurality of ways thereby making the terms grasp/grasping as claimed vague and indefinite. Examiner interpreted compresses to intend to read "...comprises surplus inventory".

Claim Rejections - 35 USC § 101

7. Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result.

Regarding Claims 1-9, claims 1-9 only recite an abstract idea. The recited distribution method/system does not apply, involve, or use the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art as explained above claims 1-9 are deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-9 are rejected under 35 U.S.C. 102(3) as being anticipated by Landvater, U.S. Patent No. 6,609,101.

Regarding Claim 1 Landvater teaches a method and system for inventory management and replenishment in a multi-level supply chain/distribution network (Abstract; Column 4, Lines 17-34). More specifically Landvater teaches a distribution management system and method comprising:

- a plurality of material (resource, parts, service, etc.) suppliers ("manufacturer's suppliers"; Column 6, Lines 45-68; Column 7, Lines 1-25; Figure 1, Elements 24 and 25);
- a plurality of product processing factories (manufacturers, plants, facilities, etc.) for processing a product by using the supplier materials provided (Column 6, Lines 45-68; Column 7, Lines 1-25; Figure 1, Element 25);
- a delivery center (distribution center, warehouse) for combining and transporting various materials from a plurality of material suppliers with the quantity of

Art Unit: 3623

material required by the product processing factories (Column 6, Lines 45-68; Column 7, Lines 1-25; Figure 1, Element 24 and 25);

- a control center (system, subsystem, site, location, etc.) for
- estimating a quantity of product to be ordered by a store (projected/forecasted sales) and a quantity of product to be produced by one or more of the product processing factories (manufacturers; e.g. replenishment and inventory management; Column 8, Lines 5-46; Column 9, Lines 3-68; Figures 2, 5); and

- deciding (determining, calculating, selecting, etc.) and ordering (purchasing, replenishment) a quantity of materials from the material supplier based on the estimated store orders (replenishment, enterprise resource planning; materials requirement planning (MRP); Column 9, Lines 3-68, Column 10, Lines 1-19; Figure 7, Element 300; Figure 2, Element 300);

- deciding and instructing the delivery center (distribution center, shipping dock, shipping/logistics system, etc.) to delivery a quantity of the materials to the product processing factories (Column 8, Lines 5-68; Column 9, Lines 1-68; Column 13, Lines 30-68; Figures 5-6).

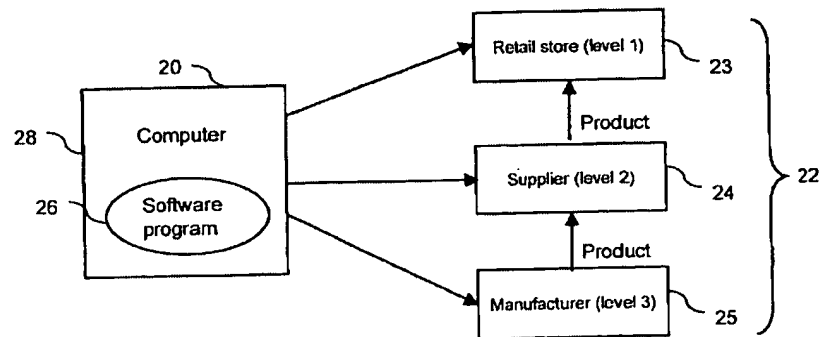


FIG. 1

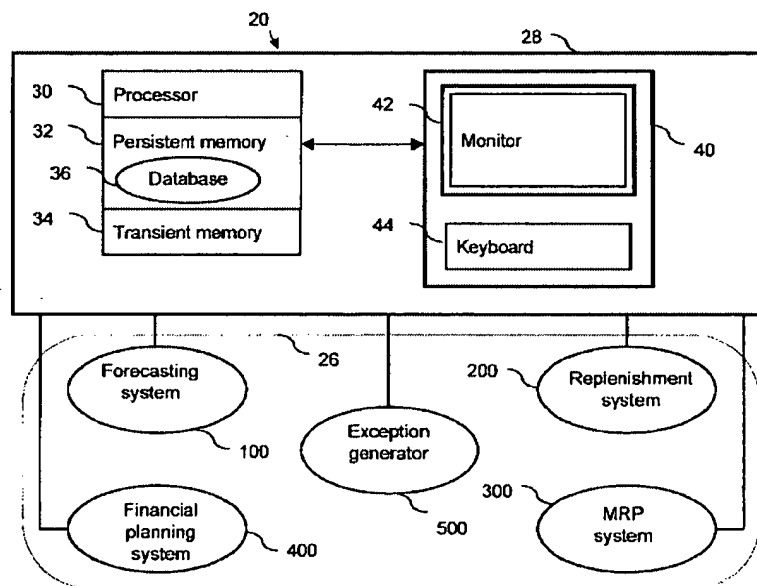


FIG. 2

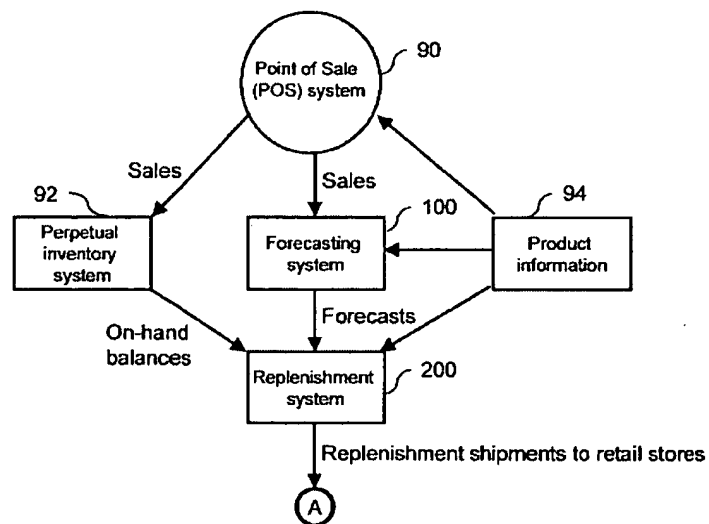


FIG. 5

Regarding Claim 2 Landvater teaches a distribution management system and method wherein the system (delivery center) comprises

- one or more primary (central, main, dedicated, etc.; “manufacturer’s” delivery/distribution center, “retail” delivery/distribution center) delivery center(s) (distribution centers, shipping docks, etc.) for gathering (collecting, staging, etc.) materials from a plurality of suppliers (Column 6, Lines 60-68; Column 1-26; Column 23, Lines 20-31); and
- a plurality of secondary delivery centers for receiving materials from one or more of the primary delivery centers (Column 6, Lines 60-68; Column 1-26); and
- transporting (shipping) the materials to the product processing factories assigned to (associated with, related to, etc.) the plurality of secondary delivery centers (i.e. shipping the plurality of materials/resources/products between the plurality of

Art Unit: 3623

entities in the distribution network; Column 6, Lines 60-68; Column 1-26; Column 9, Lines 28-35).

Regarding Claim 3 Landvater teaches a distribution management system and method wherein the system (primary delivery center; "manufacturer's" distribution center, retail distribution center being the primary/main/sole distribution center associated with the respective network participant) also serves as the control center (Column 1, Lines 33-42; Column 4, Lines 10-15). More specifically Landvater teaches that the replenishment and inventory management system for the distribution network can be "driven" (hosted by, provided by, executed, managed, etc.) by either the manufacturers/suppliers, as is the case in distribution resource planning/distribution requirements planning systems (Column 1, Lines 33-42) or third party service providers representing retailers (Column 4, Lines 10-15).

Regarding Claim 4 Landvater teaches a distribution management system and method wherein the system (delivery/distribution center) grasps (understands, receives/is given information/data related to, calculates, determines, estimates, etc.) a total inventory including:

- reserve production inventory (e.g. safety stock, on-hand, on-order) including already ordered supply for the material supplier and already produced by the material supplier (Column 8, Lines 16-25; Column 10, Lines 1-5; Column 14, Lines 3-8); and
- transport inventory (in-transit; Column 13, Lines 62-65);

Art Unit: 3623

- wherein the system (delivery/distribution center) includes surplus (excess, overage) inventory (Column 18, Lines 25-29; Column 19, Lines 32-36); and
- wherein the system (delivery/distribution center) adjusts (modify, update, revise, recalculate, re-forecast, etc.) an order quantity (forecast, replenishment, etc.) for the material supplier (supplier, manufacturer) and a supply quantity for the product processing factory (manufacturer) for enabling supply without any shortage (Column 8, Lines 13-25; Column 19, Lines 22-46).

Regarding Claim 5 Landvater teach a distribution management method and system wherein the system (delivery/distribution center) controls an ordering (replenishing) for each material (product, good, resource, component, etc.) grasps (utilizing, receiving, understanding, determining, etc.) a timing schedule regarding the material required for the product processing factory and by considering a lead (transit) time starting from the time when each material is ordered by the material supplier to the time when the product processing factory orders from the delivery center (Column 8, Lines 29-40; Column 9, Lines 19-21).

Regarding Claim 6 Landvater teach a distribution management system and method comprising:

- estimating (forecasting, projecting, determining, etc.) a quantity of product to be ordered from a store and a quantity required to be produced by the product processing

Art Unit: 3623

factories (manufacturers; Column 8, Lines 26-47; Column 13, Lines 30-42 and 59-68; Figure 2, Element 200);

- estimating demand for materials by utilizing (converting, translating, decomposing, etc.) product based data/information into material based data (materials requirement planning (MRP), Column 9, Lines 48-68; Column 10, Lines 1-19; Figure 2, Element 300) ;

- organizing the data/information for each material supplier (supplier, manufacturer, etc.) by considering and revising the estimated demand data for at least the inventory in the delivery centers (Column 8, Lines 13-25; Column 13, Lines 59-68; Column 14, Lines 1-27; Column 19, Lines 22-46); and

- ordering (replenishing, purchasing, etc.) the required materials from the suppliers based on the organized orders (Abstract; Figures 13-13c).

Regarding Claim 7 Landvater teaches a distribution management system and method wherein the revising (editing, updating, etc.) of the estimated demand takes into consideration the transport inventory (in-transit; Column 13, Lines 62-65).

Regarding Claim 8 Landvater teaches a distribution management system and method wherein the ordering (purchasing, procuring, replenishing) from each of the material suppliers (manufacturer's suppliers) takes into account/considers a lead (transit) time starting from the time when each material (resource, part, component) is ordered (replenished) from the material supplier (manufacturer's supplier) to the time

Art Unit: 3623

when product processing factory (manufacturer) orders an estimation to the delivery/distribution center (Column 8, Lines 29-40; Column 9, Lines 19-21)

Regarding Claim 9 Landvater teaches a distribution management system and method wherein the order from each of the material suppliers takes into account (considers) inventory and production information for each material supplier (safety stock, on-hand, on-order, excess inventory, etc.; Column 8, Lines 16-25; Column 10, Lines 1-5; Column 14, Lines 3-8).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Lu et al., U.S. Patent No. 5,450, 317, teach a method and system for optimized logistics planning wherein the system recommends optimal order quantities, timings, transportation mode and other common replenishment information in a supply chain.

- Brockman, Richard, U.S. Patent No. 5,884,300, teaches an inventory management system and method wherein the system manages inventory levels (e.g. in-transit, reserve/safety, on-hand, etc.) via replenishment (i.e. forecasting, ordering and distributing inventory) in a multi-level supply chain; the supply chain comprising a plurality of distribution centers (warehouses) that coordinate the merging and delivery of a plurality of materials from a plurality of suppliers to manufacturers.

- Huang et al., U.S. Patent No. 5,953,707, teach a supply chain decision support system wherein the system provides a plurality of capabilities including but not limited to demand, supply, replenishment (vendor managed) and inventory management in a multi-level distribution network (i.e. supply chain including a plurality of suppliers, manufacturers, warehouses and distribution centers).

- Ettl, et al., U.S. Patent No. 5,946,662, teach a method and system for inventory optimization wherein the system determines the appropriate inventory level to hold at each level of a supply chain (i.e. replenishment); wherein the supply chain comprises a plurality of suppliers, manufacturers, distribution centers and the like. Ettl et al. further teach that the inventory management system provides a replenishment mechanism for

Art Unit: 3623

the distribution network wherein the replenishment mechanism (subsystem, component, etc.) takes into account a safety/reserve inventories and lead-times.

- Feign et al., U.S. Patent No. 6,006,196, teach a distribution management system wherein the system utilizes well known distribution resource planning (DRP) techniques/systems to ensure the appropriate inventory levels are maintained in a multi-echelon supply chain/distribution network. Feign et al. further teach that the DRP system takes into account (grasps) a plurality of information related to inventories including but not limited to reserve (safety stock), on-hand, already ordered (back-ordered) as well as inventory lead-time requirements.

- Waller et al., Vendor Managed Inventory in the Retail Supply Chain, teach the old and well known art of inventory and replenishment management in supply chains/distribution networks wherein reseller, distribute or manufacturer makes inventory replenishment decisions for the consuming organization (e.g. vendor managed inventory). Waller et al. further teach that multi-level distribution networks comprise a plurality of entities including but not limited to retailer, manufacturer and third party owned/operated distribution centers wherein some customers have dedicated/primary distribution centers.

- Johnson, et al., Supply Chain Management, teach a plurality of old and well know research into various aspects of supply chain management including but not limited to vendor managed inventory, inventory and forecasting, transportation and logistics.

Art Unit: 3623

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJ
6/15/2005


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